

mail

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/526,125
Source: IFWP
Date Processed by STIC: 8/14/06

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/526,125

CRF Edit Date: 8/14/06
Edited by: h

___ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

___ Corrected the SEQ ID NO. Sequence numbers edited were:

___ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

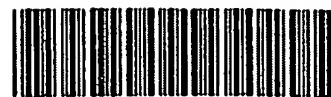
___ Deleted: ___ invalid beginning/end-of-file text ; ___ page numbers

___ Inserted mandatory headings/numeric identifiers, specifically:

___ Moved responses to same line as heading/numeric identifier, specifically:

✓ Other: deleted multiple <1107's

Revised 09/09/2003



IFWP

RAW SEQUENCE LISTING

DATE: 08/14/2006

PATENT APPLICATION: US/10/526,125

TIME: 15:41:59

Input Set : N:\AMC\Sequence listing.txt

Output Set: N:\CRF4\08142006\J526125.raw

```

3 <110> APPLICANT: CHIRON SRL
4     PIZZA Mariagrazia
5     MASIGNANI Vega
7 <120> TITLE OF INVENTION: MUTANT FORMS OF MENINGOCOCCAL ADP-RIBOSYLATING TOXIN
9 <130> FILE REFERENCE: P031668WO / PP19813.002
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/526,125
C--> 11 <141> CURRENT FILING DATE: 2005-02-28
11 <150> PRIOR APPLICATION NUMBER: GB-0220205.9
12 <151> PRIOR FILING DATE: 2002-08-30
14 <160> NUMBER OF SEQ ID NOS: 13
16 <170> SOFTWARE: SeqWin99, version 1.02
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 145
20 <212> TYPE: PRT
21 <213> ORGANISM: Neisseria meningitidis
23 <400> SEQUENCE: 1
24 Met Gly Asn Phe Leu Tyr Arg Gly Ile Ser Cys Gln Gln Asp Glu Gln
25 1                    5                    10                    15
27 Asn Asn Gly Gln Leu Lys Pro Lys Gly Asn Lys Ala Glu Val Ala Ile
28                20                25                30
30 Arg Tyr Asp Gly Lys Phe Lys Tyr Asp Gly Lys Ala Thr His Gly Pro
31        35        40        45
33 Ser Val Lys Asn Ala Val Tyr Ala His Gln Ile Glu Thr Gly Leu Tyr
34        50        55        60
36 Asp Gly Cys Tyr Ile Ser Thr Thr Thr Asp Lys Glu Ile Ala Lys Lys
37 65                70                75                80
39 Phe Ala Thr Ser Ser Gly Ile Glu Asn Gly Tyr Ile Tyr Val Leu Asn
40                85                90                95
42 Arg Asp Leu Phe Gly Gln Tyr Ser Ile Phe Glu Tyr Glu Val Glu His
43        100       105       110
45 Pro Glu Asn Pro Asn Glu Lys Glu Val Thr Ile Arg Ala Glu Asp Cys
46        115       120       125
48 Gly Cys Ile Pro Glu Glu Val Ile Ile Ala Lys Glu Leu Ile Glu Ile
49        130       135       140
51 Asn
52 145
55 <210> SEQ ID NO: 2
56 <211> LENGTH: 145
57 <212> TYPE: PRT
58 <213> ORGANISM: Neisseria meningitidis
60 <400> SEQUENCE: 2
61 Met Gly Asn Phe Leu Tyr Arg Gly Ile Ser Cys Gln Gln Asp Glu Gln
62 1                    5                    10                    15

```

RAW SEQUENCE LISTING

DATE: 08/14/2006

PATENT APPLICATION: US/10/526,125

TIME: 15:41:59

Input Set : N:\AMC\Sequence listing.txt

Output Set: N:\CRF4\08142006\J526125.raw

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64 Asn Asn Gly Gln Leu Lys Pro Lys Gly Asn Lys Ala Glu Val Ala Ile
65          20          25          30
67 Arg Tyr Asp Gly Lys Phe Lys Tyr Asp Gly Lys Ala Thr His Gly Pro
68          35          40          45
70 Ser Val Lys Asn Ala Val Tyr Ala His Gln Ile Glu Thr Gly Leu Tyr
71          50          55          60
73 Asp Gly Cys Tyr Ile Ser Thr Thr Thr Asp Lys Glu Ile Ala Lys Lys
74 65          70          75          80
76 Phe Ala Thr Ser Ser Gly Ile Glu Asn Gly Tyr Ile Tyr Val Leu Asn
77          85          90          95
79 Arg Asp Leu Phe Gly Gln Tyr Ser Ile Phe Glu Tyr Asp Val Glu His
80          100          105          110
82 Pro Glu Asn Pro Asn Glu Lys Glu Val Thr Ile Arg Ala Glu Asp Cys
83          115          120          125
85 Gly Cys Ile Pro Glu Glu Val Ile Ile Ala Lys Glu Leu Ile Glu Ile
86          130          135          140
88 Asn
89 145
92 <210> SEQ ID NO: 3
93 <211> LENGTH: 145
94 <212> TYPE: PRT
95 <213> ORGANISM: Neisseria meningitidis
97 <400> SEQUENCE: 3
98 Met Gly Asn Phe Leu Tyr Arg Gly Ile Ser Cys Gln Gln Asp Glu Gln
99 1          5          10          15
101 Asn Asn Gly Gln Leu Lys Pro Lys Gly Asn Lys Ala Glu Val Ala Ile
102          20          25          30
104 Arg Tyr Asp Gly Lys Phe Lys Tyr Asp Gly Lys Ala Thr His Gly Pro
105          35          40          45
107 Ser Val Lys Asn Ala Val Tyr Ala His Gln Ile Glu Thr Gly Leu Tyr
108          50          55          60
110 Asp Gly Cys Tyr Ile Ser Thr Thr Thr Asp Lys Glu Ile Ala Lys Lys
111 65          70          75          80
113 Phe Ala Thr Ser Ser Gly Ile Glu Asn Gly Tyr Ile Tyr Val Leu Asn
114          85          90          95
116 Arg Asp Leu Phe Gly Gln Tyr Ser Ile Phe Glu Tyr Glu Val Asp His
117          100          105          110
119 Pro Glu Asn Pro Asn Glu Lys Glu Val Thr Ile Arg Ala Glu Asp Cys
120          115          120          125
122 Gly Cys Ile Pro Glu Glu Val Ile Ile Ala Lys Glu Leu Ile Glu Ile
123          130          135          140
125 Asn
126 145
129 <210> SEQ ID NO: 4
130 <211> LENGTH: 145
131 <212> TYPE: PRT
132 <213> ORGANISM: Neisseria meningitidis
134 <400> SEQUENCE: 4
135 Met Gly Asn Phe Leu Tyr Arg Gly Ile Ser Cys Gln Gln Asp Glu Gln

```

RAW SEQUENCE LISTING

DATE: 08/14/2006

PATENT APPLICATION: US/10/526,125

TIME: 15:41:59

Input Set : N:\AMC\Sequence listing.txt

Output Set: N:\CRF4\08142006\J526125.raw

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202 <210> SEQ ID NO: 8
203 <211> LENGTH: 14
204 <212> TYPE: PRT
205 <213> ORGANISM: Neisseria meningitidis, serogroup A
207 <400> SEQUENCE: 8
208 Phe Leu Ala Asn Leu Leu Lys Asp Phe Arg Arg Ile Thr Leu
209 1 5 10
211 <210> SEQ ID NO: 9
212 <211> LENGTH: 19
213 <212> TYPE: PRT
214 <213> ORGANISM: Neisseria meningitidis, serogroup A
216 <400> SEQUENCE: 9
217 Met Ser Leu Val Glu Leu Lys Val Pro Asp Ile Gly Gly His Glu Asn
218 1 5 10 15
220 Val Asp Ile
224 <210> SEQ ID NO: 10
225 <211> LENGTH: 180
226 <212> TYPE: DNA
227 <213> ORGANISM: Neisseria gonorrhoeae
229 <400> SEQUENCE: 10
230 tattctctggc gaacctgttg aaagacttcc gccgcattac cttataaaat aaaacatccc 60
231 tctcaagcag tctgataatg ttgggattgc ttgagattga tgagtgatgg tgttaaattc 120
232 aaactttaaa ttaataactt atgggaaatt tcttatttat atagaggcat tagttgccaa 180
234 <210> SEQ ID NO: 11
235 <211> LENGTH: 14
236 <212> TYPE: PRT
237 <213> ORGANISM: Neisseria gonorrhoeae
239 <400> SEQUENCE: 11
240 Phe Leu Ala Asn Leu Leu Lys Asp Phe Arg Arg Ile Thr Leu
241 1 5 10
243 <210> SEQ ID NO: 12
244 <211> LENGTH: 7
245 <212> TYPE: PRT
246 <213> ORGANISM: Neisseria gonorrhoeae
248 <400> SEQUENCE: 12
249 Met Gly Asn Phe Leu Phe Ile
250 1 5
252 <210> SEQ ID NO: 13
253 <211> LENGTH: 147
254 <212> TYPE: PRT
255 <213> ORGANISM: Vibrio cholerae
257 <400> SEQUENCE: 13
258 Lys Leu Tyr Arg Ala Asp Ser Arg Pro Pro Asp Glu Ile Lys Gln Ser
259 1 5 10 15
261 Gly Gly Leu Met Pro Arg Gly Gln Ser Glu Tyr Phe Asp Arg Gly Thr
262 20 25 30
264 Gln Met Asn Ile Asn Leu Tyr Asp His Ala Arg Gly Thr Gln Thr Gly
265 35 40 45
267 Phe Val Arg His Asp Asp Gly Tyr Val Ser Thr Ser Ile Ser Leu Arg

```

RAW SEQUENCE LISTING

DATE: 08/14/2006

PATENT APPLICATION: US/10/526,125

TIME: 15:41:59

Input Set : N:\AMC\Sequence listing.txt

Output Set: N:\CRF4\08142006\J526125.raw

```
268      50      55      60
270 Ser Ala His Leu Val Gly Gln Thr Ile Leu Ser Gly His Ser Thr Tyr
271 65      70      75      80
273 Tyr Ile Tyr Val Ile Ala Thr Ala Pro Asn Met Phe Asn Val Asn Asp
274      85      90      95
276 Val Leu Gly Ala Tyr Ser Pro His Pro Asp Glu Gln Glu Val Ser Ala
277      100     105     110
279 Leu Gly Gly Ile Pro Tyr Ser Gln Ile Tyr Gly Trp Tyr Arg Val His
280      115     120     125
282 Phe Gly Val Leu Asp Glu Gln Leu His Arg Asn Arg Gly Tyr Arg Asp
283      130     135     140
285 Arg Tyr Tyr
286 145
```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/526,125

DATE: 08/14/2006

TIME: 15:42:00

Input Set : N:\AMC\Sequence listing.txt

Output Set: N:\CRF4\08142006\J526125.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

**Raw Sequence Listing before editing
(for reference only)**



IFWP

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/526,125

DATE: 08/09/2006
TIME: 09:34:27

Input Set : F:\Sequence listing.txt
Output Set: N:\CRF4\08092006\J526125.raw

delete duplicate
1107's

W--> 8 <110> APPLICANT: CHIRON SRL
W--> 4 <110> APPLICANT: PIZZA Mariagrazia
W--> 5 <110> APPLICANT: MASIGNANI Vega
7 <120> TITLE OF INVENTION: MUTANT FORMS OF MENINGOCOCCAL ADP-RIBOSYLATING TOXIN
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12 <151> PRIOR FILING DATE: 2002-08-30
14 <160> NUMBER OF SEQ ID NOS: 13
16 <170> SOFTWARE: SeqWin99, version 1.02
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 145
20 <212> TYPE: PRT
21 <213> ORGANISM: Neisseria meningitidis
23 <400> SEQUENCE: 1
24 Met Gly Asn Phe Leu Tyr Arg Gly Ile Ser Cys Gln Gln Asp Glu Gln
25 1 5 10 15
27 Asn Asn Gly Gln Leu Lys Pro Lys Gly Asn Lys Ala Glu Val Ala Ile
28 20 25 30
30 Arg Tyr Asp Gly Lys Phe Lys Tyr Asp Gly Lys Ala Thr His Gly Pro
31 35 40 45
33 Ser Val Lys Asn Ala Val Tyr Ala His Gln Ile Glu Thr Gly Leu Tyr
34 50 55 60
36 Asp Gly Cys Tyr Ile Ser Thr Thr Thr Asp Lys Glu Ile Ala Lys Lys
37 65 70 75 80
39 Phe Ala Thr Ser Ser Gly Ile Glu Asn Gly Tyr Ile Tyr Val Leu Asn
40 85 90 95
42 Arg Asp Leu Phe Gly Gln Tyr Ser Ile Phe Glu Tyr Glu Val Glu His
43 100 105 110
45 Pro Glu Asn Pro Asn Glu Lys Glu Val Thr Ile Arg Ala Glu Asp Cys
46 115 120 125
48 Gly Cys Ile Pro Glu Glu Val Ile Ile Ala Lys Glu Leu Ile Glu Ile
49 130 135 140
51 Asn
52 145
55 <210> SEQ ID NO: 2
56 <211> LENGTH: 145
57 <212> TYPE: PRT
58 <213> ORGANISM: Neisseria meningitidis
60 <400> SEQUENCE: 2
61 Met Gly Asn Phe Leu Tyr Arg Gly Ile Ser Cys Gln Gln Asp Glu Gln
62 1 5 10 15

**Does Not Comply
Corrected Diskette Needed**